K. A. Chowdhury: 1902–1978

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PROFESSOR Kafil Ahmad Chowdhury was born February 1, 1902 in Raipura, a village, in the Naokhali district of East Bengal, now Bangladesh. His father, Ayub Ali, a landlord, passed away when Kafil was only four years old and he was brought up by his mother, Hyatunnessa, and his elder brothers.

Subsequent to his earlier school education at Raipura and Lakhimpur in Bangladesh, Kafil Chowdhury went to Calcutta to study humanities. Soon after his graduation in arts in 1922 from Calcutta University, he left for Edinburgh to enter a course in forestry at Edinburgh University. Kafil received his first degree in science from Edinburgh University in 1925.

At Edinburgh he worked under Sir William Wright Smith, professor of botany. He also had occasion to meet and learn under professors James Cossar Ewart, James Hartley Ashworth, and Sir James Walker, distinguished men of science.

On returning to India, he joined the Forest Research Institute in Dehra Dun as a wood technologist. Later, he was sent to Syracuse University to assist Professor H. P. Brown in a project on commercial timbers of India. He also acquired an M.S. from Syracuse. On returning from Syracuse in 1929, he established the Wood Anatomy Laboratory at Dehra Dun, which eventually became one of the outstanding laboratories of its kind in Asia. His researches by 1940 earned him the highest degree in science, the D.Sc. of Edinburgh University.

During his research career, Kafil Chowdhury was the recipient of honors from several scientific bodies in India and abroad. In 1940, he presided over the Botany Section of the Indian Science Congress; in 1945, the Government of India honored him with an MBE for his wartime services; and in 1954, he became the president of the Indian Botanical

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Society. Professor Chowdhury presided over two symposia under the 8th International Botanical Congress held at Seattle and subsequently was honored with the honorary vice-presidentship of the 10th International Botanical Congress which met at Edinburgh. In 1961, he was vice-president of the Pacific Science Congress held at Honolulu. In 1970, he presided over the UNESCO Conference on Contribution of People of Central Asia in the Development of Sciences, held at Islamabad, Pakistan. A member of various scientific committees and advisory boards of a number of organizations in India and abroad, he was an elected fellow of the Indian Science Academy and of the Linnean Society of London.

Professor Chowdhury also visited several highly reputed laboratories abroad and delivered extension lectures at the universities of Leeds, Yale, Syracuse, Cornell, Munich, and Hamburg.

On his retirement from the Forest Research Institute at Dehra Dun, in 1956 he joined the Aligarh Muslim University as professor of botany, retiring from there in 1968. It is here that he largely devoted himself to the history of cultivated plants from materials from archaeological sites. He continued active research till his death.

Among his more than one hundred publications, *The Identification of Important Indian Sleeper Woods* in 1933; *West Bengal Commercial Timber: Their Identification, Properties and Uses* in 1951; *Indian Woods* in 1978; *Recent Advances in the Anatomy of Tropical Seed Plants* in 1969; botanical monographs on *Abies* and *Picea* and *Ancient Agriculture and Forestry in North India* are important reference books.

From the late 1940s, Professor Chowdhury involved himself in the investigation of prehistoric plant remains. His work on the identification and description of charcoals from Harappa, Sisupalgarh, Hastinapura, Maski, Sri Lanka, and other sites, together with his inference of past environment and the varied uses of wood by prehistoric man, has immensely advanced our knowledge. He also investigated carbonized food grains from some sites and discussed the significance of archaeological plant remains from several angles and as a source of the history of science. His important discovery is the establishment of the antiquity of cotton, which has had a great bearing upon the origin of Old World cotton.

Professor Chowdhury also studied the growth rings in Indian trees and had established distinct growth rhythms for certain species. Perhaps the Indian tropical trees did not provide him ample scope to build up the science of dendrochronology, which would have been equally valued by archaeologists.

A high standard of care and integrity was the hallmark of Professor Chowdhury's investigations, and it was this which made him India's leading torchbearer in his own specialized field of plant anatomy. His reference books and other publications will continue to inspire researchers in his field.

Publications of Professor K. A. Chowdhury on Archaeobotany

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1953*a* Flowering plants as criteria for the palaeoclimatic conditions. Paper read at the Symposium on Climate and Vegetation, Indian Scientific Congress, Lucknow.

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1967 (With R. D. Preston and R. K. White) Structural changes in some ancient Indian timbers. *Royal Soc. B.* 168: 148–157.

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1971*b* (With G. M. Buth) Cotton seeds from the Neolithic in Egyptian Nubia, and the origin of Old World cotton. *Botanical Journal Linnean Society* 3: 303–312.

1971*c* (With K. S. Saraswat and others) 4000–3500 years old barley, rice and pulse from Atranjikhera. *Science and Culture* 37(11):531.

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1972 (With G. M. Buth) 4500 year-old plant remains from Egyptian Nubia. *Proc. Indian National Science Academy* 38:55–71.

1974*a* History of Indian cereals. In *Aspects and Appraisals of Indian Palaeobotany,* pp. 672–674. Lucknow: Birbal Sahui Institute of Palaeobotany.

1974*b* History of Indian cereals. In *Aspects and Appraisals of Indian Palaeobotany,* pp. 665–671. Lucknow: Birbal Sahui Institute of Palaeobotany.

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